

From: [Semerad, Jim L.](#)
To: [jacki](#)
Cc: [Alexis North](#); [Cindy Beeler](#); [Tricia Pfeiffer](#); [Kyle Olson](#); [Dihle, Mark A.](#); [Peterson, Todd F.](#); [Jahraus, Tim M.](#); [Kristen Keteles](#); [Roberts, Kris D.](#); [O'Clair, Terry L.](#)
Subject: RE: air?
Date: 08/15/2012 07:36 AM

Jacki:

We have completed some checking on this issue and found the following:

- Someone from our office was traveling between Powers Lake and Minot last weekend and saw 2 farmers applying chemicals to their crops but I agree with you that the farms immediately in your area are the ones of concern. If the farms immediately in your area weren't applying chemicals then the dilution from much more distant farms should result in negligible concentrations. I continue to think that the problem is not caused by "distant" sources.
- We checked with someone who lives just NW of Williston. They did not notice any problems with air quality last weekend including petroleum smells.
- Our monitors did not pick up any unusual concentrations.
- The pollen counts have been very high but the weekend was not worse than other days (maybe even less so).
- To our knowledge, no unusual operations occurred at any oil and gas facilities. Normal operations of drilling and flaring occurred as you list in your email.

I wish we had found something more definitive.

We will continue to conduct inspections in an attempt to ensure proper operations and compliance is attained.

Jim Semerad

Division of Air Quality

Manager, Permitting and Compliance

State Dept. of Health

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Bismarck ND 58501-1947

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Division Website:

<http://www.health.state.nd.us/AQ/Airhomepage.htm>

From: jacki [<mailto:jboid@dia.net>]

Sent: Monday, August 13, 2012 10:55 AM

To: Semerad, Jim L.

Cc: Alexis North; Cindy Beeler; pfeiffer.Tricia@epamail.epa.gov; Kyle Olson; Dihle, Mark A.; Peterson,

Todd F.; Jahraus, Tim M.; keteles.Kristen@epamail.epa.gov

Subject: Re: air?

Monday morning and we are not starting this week very good, the air quality has been very bad all weekend. Drilling rig, workover rig, flares burning all in this area, I again have DEAD animals in my yard today. You may also note that there are NO farmers in the area using any chemicals, they are all busy harvesting their crops and putting up hay and straw right now. Over the weekend both Steve and I had to use inhalers more than normal. The petroleum smell in the air is so bad your eyes burn.

----- Original Message -----

From: [Semerad, Jim L.](#)

To: [jacki](#)

Cc: [Alexis North](#) ; [Cindy Beeler](#) ; pfeiffer.Tricia@epamail.epa.gov ; [Kyle Olson](#) ; [Dihle, Mark A.](#) ; [Peterson, Todd F.](#) ; [Jahraus, Tim M.](#) ; keteles.Kristen@epamail.epa.gov

Sent: Wednesday, August 08, 2012 8:21 AM

Subject: RE: air?

Jacki:

In response to your email, we have checked with the local oil companies and have found that there is no monthly maintenance operation that would match up with your symptoms (see yellow highlight below).

Although your observations didn't result in an answer, it is the kind of brainstorming that may ultimately find the answer you are looking for. Since you see a pattern, I recommend that you further explore causes that could match up with the timing of your symptoms – do you frequent a certain area of your farm each month, do you come into contact with certain cattle feeds or chemicals, do you eat certain foods, etc. I know that you have probably already considered these types of possibilities but it may be something very simple yet very elusive.

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From: jacki [<mailto:jboid@dia.net>]

Sent: Thursday, August 02, 2012 7:51 AM

To: Semerad, Jim L.

Cc: Alexis North; Cindy Beeler; pfeiffer.Tricia@epamail.epa.gov; Kyle Olson; Dihle, Mark A.; Peterson, Todd F.; Jahraus, Tim M.; keteles.Kristen@epamail.epa.gov

Subject: Re: air?

I happened to notice last night on my antibiotic perscription that I seem to have to get this refilled every month around the same time. I checked back on my daily notes and found that on or near the 30th of the past months I have noticed the strong sewer smell in the air, followed by various health problems - sinus infection, sore throat, ear infection, headache, breathing problems, burning eyes, bad leg cramps, dental problems (filings, crowns have fallen out of both our teeth, broken teeth), and sick animals. This is a constant endless circle with antibiotic treatment and on some months prednisone is necessary for both myself and Steve. I do not think this is a freak act of nature or coincidence, **is there possibly a reason for a release due to maintence or storage tank levels at certain times of the month?**

----- Original Message -----

From: [Semerad, Jim L.](#)

To: [jacki](#)

Cc: [Alexis North](#) ; [Cindy Beeler](#) ; pfeiffer.Tricia@epamail.epa.gov ; [Kyle Olson](#) ; [Dihle, Mark A.](#) ; [Peterson, Todd F.](#) ; [Jahraus, Tim M.](#)

Sent: Tuesday, July 31, 2012 11:41 AM

Subject: RE: air?

Jacki:

My response/comments are below in red text – I hope you find the insight helpful.

Jim Semerad

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Division Website:

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From: jacki [<mailto:jboid@dia.net>]

Sent: Sunday, July 29, 2012 3:21 PM

To: Semerad, Jim L.; pfeiffer.Tricia@epamail.epa.gov; Kyle Olson

Cc: Alexis North; Cindy Beeler

Subject: air?

I am not sure what the change was in the area on Firday & Saturday but the air quality actually seemed better, I was starting to smell things again, like grass and hay while working in the yard. Steve and I both felt a bit better, not so tired. I noticed the cats were breathing better and their eyes were not all matted up. Now something has happened again this afternoon, I have a very sore throat and congested - I have been outside working, the cats are all coughing and noses and eyes are all matted up. We do have a north-north west wind, and there is a drilling rig to the north I can see but it is several miles away. **We checked air quality downwind of the rig last week and found no apparent problems, and you are correct, the distance is pretty substantial.** I have noticed that the new Statoil well to the west has been blowing black smoke for the past 2 days, I stopped and talked to the relief pumper on Friday morning and asked him about this - he did not know why, said there may be oil spilling into the flare. **If this has continued, we will contact them – let me**

know. At times intermittent smoke may come from a well; however, if a well has heavy smoke blowing for a continuous period as you describe, you can contact NDIC and the Department with specific well names and numbers for us to investigate. Also noticed yesterday that the flare to the east on the Oasis well is burning, the flare to the west right behind us was not but the flares farther west on Oasis sites were - a lot of black smoke coming from one of them. Again, flaring can generate a small wisp of smoke as part of normal operation but significant smoke indicates that there may be operational problems – let us know if this is the case. There is a frack job to the south but that is at least 4 miles and the wind is not coming from that direction.

Is this H₂S coming from somewhere, maybe right here on our property? ND has a stringent H₂S limit of only 50 parts per billion (ppb). Personal monitors usually alarm at 10 parts per million (which equals 10,000 ppb) to protect health. The reason ND's limit is so much more stringent is that H₂S is very pungent and creates a nuisance at far lower levels. In general, odors are noticeable around 5-15 ppb for most people. Our instrument measures below these levels. The distinctive odor of H₂S makes it easily identifiable, but we have not measured or smelled it in your area.